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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

EX PARTE

William F. Caton
Acting Secretary
Federal Communications Commission
Mail Stop 1170
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Dear Mr. Caton:

Re: CC Docket No. 95-116, Number Portability

On April 19, Ross Ireland, Vice President, Nancy Woolf, and I of Pacific Telesis and Jerry Abercrombie of Pacific Bell met with Jim Casserly of Commissioner Ness' office to discuss the attached material. Please associate this with the above-referenced docket.

We are submitting two copies of this notice in accordance with Section 1.1206(a)(1) of the Commission's Rules.

Please stamp and return the provided copy to confirm your receipt. Please contact me should you have any questions or require additional information concerning this matter.

Sincerely,

Alan Ciamporcero

cc: Jim Casserly

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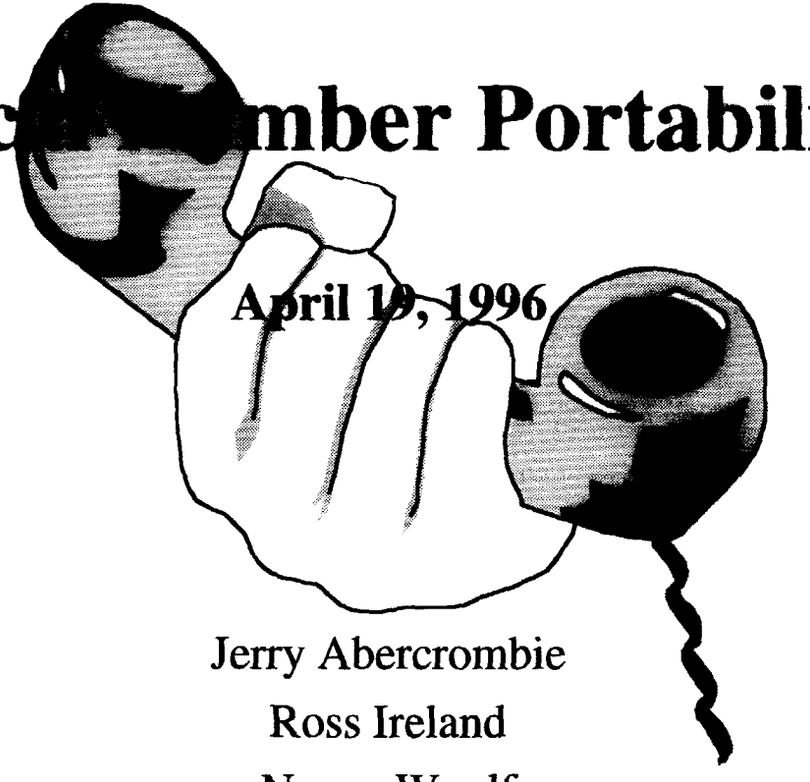
Local Number Portability



April 19, 1996

Jerry Abercrombie
Ross Ireland
Nancy Woolf

Pacific Bell's Position on Local Number Portability

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- Do not mandate AT&T's Location Routing Number (LRN) database technology
  - Requires massive volumes of queries
  - Extremely inflexible
    - » dictates architecture
    - » no ability for carriers to distinguish their products
  - Extremely expensive
    - » Pacific's cost is expected to be $1 Billion over 3 years.
- **The Commission should adopt routing, service and performance standards, instead of specifying technologies and architectures**
  - Widespread acceptance of using location routing number (*"lrn"*) as *common routing information*
    - » This is not the same as AT&T's LRN

AT&T's LRN is not a *"done deal"*

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- AT&T's LRN has not been accepted as a consensus long-term solution
  - Not adopted in California
  - Not the best alternative for all carriers
- AT&T's LRN is only one of several long-term number portability proposals
- Widespread acceptance of using location routing number (*"lrn"*) as *common routing information*
  - This is not the same as AT&T's LRN
    - » "LRN" (large case) denotes AT&T's full database solution
    - » "lrn" (small case) has been used to indicate the common routing information
- Alternate proposal, Query on Release, is currently being evaluated by nine national LECs in the U.S. and Canada

The technology for Number Portability is still evolving

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- Local Area Number Portability (LANP), first introduced and trialed by ELI/US Intelco, failed to materialize
- MCI's Carrier Portability Code (CPC), initially heralded as the "long-term" solution, has been rejected in California, and degraded by MCI as only an interim, throw-away solution
- AT&T's LRN proposal, while gaining some acceptance among new entrants, is still unproven
- "Carrier Choice" will permit carriers to choose the best technological solution that is compatible with their networks, while allowing for continued innovation

What is Query on Release (QoR)?

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- QoR is a network capability that significantly reduces the number of database queries
  - Only requires queries on ported calls
  - Eliminates unnecessary queries for non-ported calls
- QoR is more cost effective and technically efficient than LRN
- QoR, like LRN, is an N-1 type configuration
- QoR uses a common routing scheme
- QoR queries an external database
- QoR is similar to Release to Pivot (RTP) in that queries are only performed on calls to numbers that have ported
- QoR is different than RTP in that it is AIN-based

How does QoR work?

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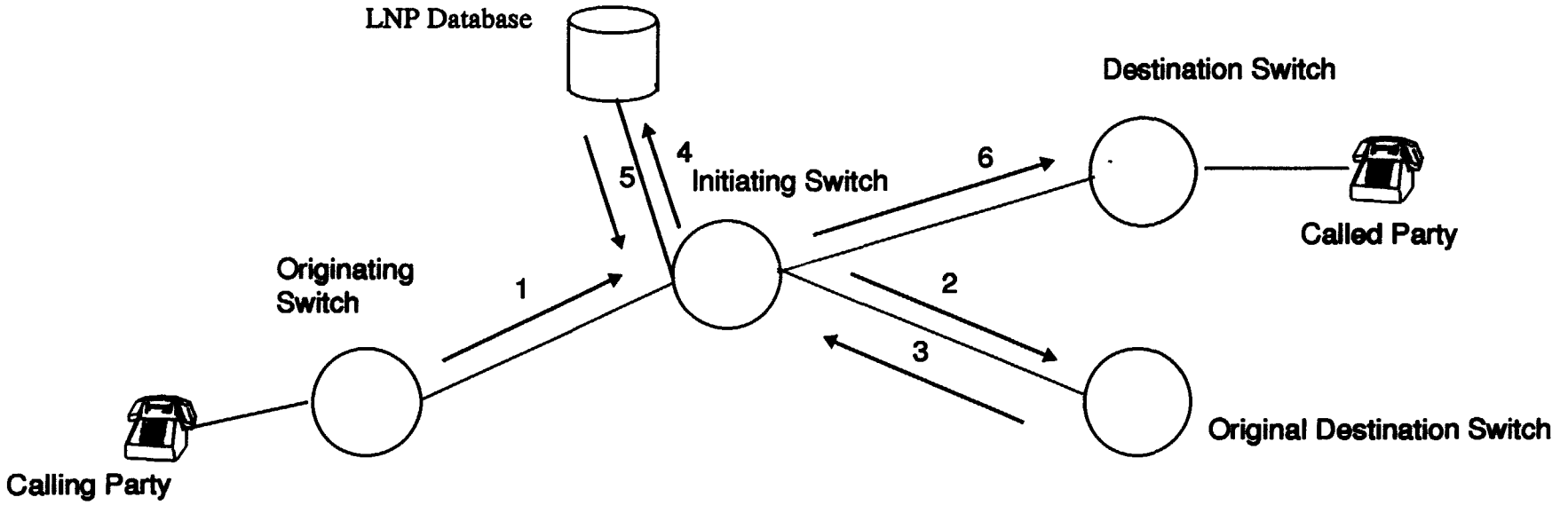
- Prior to querying a routing database, attempts to complete call to switch assigned NPA-NXX of dialed number
- If number served by switch, call is completed just as it is today
- If number is ported, call is released back to N-1 switch to perform database query
- Database query to an external database is performed in N-1 network to determine the location routing number (lrn) of the new serving switch
- Call is then efficiently routed to the serving switch

Basic QoR Operation



1. The calling party originates a call and Originating switch routes the call accordingly.

2. After receiving the incoming call setup message, the Initiating switch will route the call toward Original Destination switch with QoR indicator.

3. Upon the receipt of incoming call, the Original Destination switch determined that the called number does not reside here. It releases the call back to Initiating switch and indicates that it does not serve the called number.

4. In order to route the call, the Initiating switch will need to know the routing information (lrn) of the Destination switch. Therefore, Initiating switch will query the LNP database for this information.

5. The LNP database will send a response message with routing information (lrn).

6. Based on the routing information (lrn) in the response message, the Initiating switch will route the call toward the Destination switch where called party currently resides.

Competitors' concerns are unfounded

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- **Competitively Neutral** - Long-term number portability methods that impose massive financial burdens on particular classes of carriers are not competitively neutral.
- **Decreased Complexity** - Number portability solutions that decrease the volume of queries should be actively embraced.
- **Decreased Cost** - It is estimated that AT&T's LRN technology could cost Pacific approximately $1 Billion over a three year period to implement.
- **Concurrent Availability** - Major switch vendors plan to have Query on Release available concurrent with other triggering options.
- **Imperceptible Post Dial Delay** - The Commission should require that any LNP method comply with standards regarding post-dial delay and any other relevant criteria.
- QoR meets the requirements of the Telecommunications Act

The Reply Comments refute statements by MCI, and others, that only AT&T's LRN has wide acceptance

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GTE

"...the Commission should state that the location routing number (as opposed to AT&T's LRN, which is a triggering mechanism) should be the common routing information employed by all trigger mechanisms, and should allow each carrier to choose the mechanism best suited to its own network."

US West

*"While resolution of the routing/addressing plan is timely, it would be premature to decide the details of LRN implementation...**there are several triggering mechanisms which are compatible with an LRN addressing plan** and it appears, interoperable with each other."*

Bell South

*"...the issue of where and how queries are to be launched exists independently of the selection of a particular call model and needs further evaluation. Neither the Commission nor the industry need to select any single triggering mechanism to effectuate LTNP; **carriers should be able to specify the triggering mechanism most appropriate for use on their own networks.**"*

The Reply Comments refute statements by MCI, and others, that only AT&T's LRN has wide acceptance (Cont.)

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NYNEX

*"LRN is an **addressing scheme** which, when integrated into an overall number portability platform, holds the best promise of any addressing scheme evaluated so far..."*

Bell Atlantic

*" LRN is merely a **call handling protocol**...It is not a service with defined technical and operational specifications."*

SBC

*"Importantly, **LRN is not the only long-term solution being considered** by the industry; other technical alternatives also hold promise..."*

Ameritech

"...QoR is a viable enhancement to LRN."

California Public Utilities Commission

"California also disagrees with parties which claim that there is a particular solution which is ready to be implemented nationwide."

Summary of Pacific's Position

The Commission should adopt routing, service and performance standards, instead of specifying technologies and architectures

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- The Commission should mandate that common routing information be passed between networks and service quality standards be established as a federal number portability policy
- Carriers should be permitted to deploy the most efficient and cost effective solutions for number portability that are compatible with their respective networks.
- AT&T's Location Routing Number (LRN) database technology should not be mandated on all carriers
- The Commission should not preclude the use of QoR, or other viable alternatives that may be developed
- Incumbent LECs should not bear a disproportionate share of the costs of LNP
- Interim number portability alternatives are acceptable for purposes of satisfying the competitive checklist
- The Commission should develop a competitively neutral cost recovery mechanism that spreads the cost of long-term number portability equitably among all telecommunications carriers
- Significant issues must still be addressed beyond which architectures should be considered

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Status of California Local Number Portability Task Force

California Local Number Portability Task Force is currently evaluating potential architectures

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Mission Statement

The California Local Number Portability Task Force will evaluate, recommend and ultimately implement a technically and economically feasible solution for service provider number portability that meets the needs of California consumers and carriers in a competitively neutral manner.

- Independent LECs
- IECs
- CLECs
- Wireless Carriers
- Cable TV
- CAPs
- Associations
- Switch Vendors
- CPUC's Commission Advisory and Compliance Division
- CPUC's Division of Ratepayer Advocates
- California Department of Consumer Affairs

Initially eight number portability architectures were considered by the Task Force

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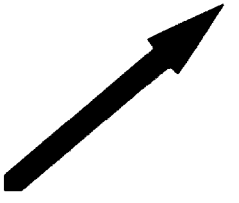
Considered

- AT&T Location Routing Number (LRN)
- Pacific's Release-to-Pivot (RTP/lrn)
- MCI's Carrier Portability Code (CLC)
- GTEC's Non-Geographic Number (NGN)
- ELI/US INTELCO Local Area Number Portability (LANP)

Not Pursued

- Sprint's Zip Code routing proposal
- ITN/Tandem/AG Communications Systems
- Nortel



California Local Number Portability Task Force issued its Report on February 29, 1996

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- The Task Force did agree to common routing information
- Two Recommendations were proposed:
  - Common routing information with "Carrier Choice" of trigger
  - AT&T's structured technology (LRN)
- **"Carrier Choice":**
  - *The Commission should permit carriers to choose the most efficient and interoperable triggering mechanism for number portability that utilizes the common routing information and complies with appropriate national industry standards*
- This recommendation is supported by the Division of Ratepayer Advocates, California Department of Consumer Affairs, practically all incumbent local exchange carriers, and some wireless carriers
- Additional information on relative cost of alternatives has been ordered to be submitted to the CPUC

The Task Force could not come to closure on a single solution, however there was agreement as to the routing scheme...location routing number (lrn)

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Alternative 1	Alternative 2
• AT&T	• Contel of California
• AT&T Wireless	• Contel Cellular
• AirTouch	• ***California Dept. of Consumer Affairs***
• CCTA	• ***Division of Ratepayer Advocates***
• Citizens Telecom	• GTE California Inc.
• Cox Enterprises	• GTE Mobilnet
• ELI	• Pacific Bell
• Falcon	• Pacific Bell Mobile Services
• MFS	• Roseville Telephone Company
• MCI Metro	
• TCG	
• Time Warner	

The Commission must not be misled into thinking that there is universal support for AT&T's LRN. There are far more new entrants than incumbents, creating a misleading impression of "overwhelming support".

California Department of Consumer Affairs and the CPUC's Division of Ratepayer Advocates support "Carrier Choice," rather than AT&T's expensive LRN proposal

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"One of the advantages of the common routing solution is that it allows each telecommunications provider to select the triggering mechanism which is most efficient and cost effective for its network. In a truly competitive market, each provider will adopt the triggering mechanism which is most efficient, and at the same time most cost-effective. That is because, in order to stay in business, it will need to provide local number portability at a price which it can pass on to its customers and, at the same time, remain competitive with other providers."

Comments of the California Department of Consumer Affairs on the California Local Number Portability Task Report Dated February 29, 1996, Public Utilities Commission of the State of California, R.95-04-043, I.95-04-044, filed March 14, 1996, at 11)

Significant issues (in addition to architectures) must still be addressed

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Concerns

- Rate Areas
- Database Ownership
- Number Assignment and Administration
- Code Exhaust
- Cost Recovery

Technical Considerations

- Post Dial Delay
- Impact on SS7 Signaling
- Interworking/MF Signaling
- Impact on Switches(SSPs)
- STPs
- Network Databases
- Impacts on Operational Systems
- Switching features (e.g. CLASS)
- Operator Services
- 911/E911
- AIN
- Reliability

Interim Number Portability

Until long-term number portability is technically feasible, interim number portability is acceptable and meets "checklist"

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- Act expresses Congress's clear judgment that interim number portability alternatives are acceptable for purposes of satisfying the competitive checklist.
  - Remote Call Forwarding (RCF)
  - Direct Inward Dialing (DID)
- BOC entry into the interLATA market cannot be delayed by the Commission pending implementation of a long-term number portability solution.
- The Commission need not further consider whether RCF and DID are appropriate interim measures.
  - California already requires interim number portability through RCF
    - » Pacific provides Directory Number Call Forwarding
    - » Provided under contract to MFS
    - » Interim Number Portability tariff pending before the CPUC

Incumbent LECs should not bear a disproportionate share of the costs of LNP

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- The Commission should develop a *competitively neutral* cost recovery mechanism that spreads the cost of long-term number portability equitably among all telecommunications carriers.
- New entrants contend that incumbent LECs should bear all costs of internal network upgrades, as well as a proportion of shared costs based on relative number of lines of each carrier.
- Compelling incumbent carriers to bear the vast majority of costs of LNP cannot be considered competitively neutral.

CPUC Infrastructure Report

Reject "an interventionist approach to infrastructure development based upon micromanagement or command-and-control regulation"

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- *"To the maximum extent possible,* ***maintain a technology-neutral policy****. Emphasize 'performance standards' over technology-specific standards to* ***allow telecommunications providers to tailor their use of technology in a manner which best meets their needs.****"*

- *"...****policy should not dictate specific technologies*** *to deliver advanced telecommunications, nor select specific firms that will be responsible for infrastructure development."*

Common routing information passed between networks (the "location routing number") and service quality standards (e.g., post-dial delay) should be established as a federal number portability policy, instead of specifying technologies and architectures.

Conclusion

The Commission should adopt routing, service and performance standards, instead of specifying technologies and architectures

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- The Commission should mandate that common routing information be passed between networks and service quality standards be established as a federal number portability policy
- Carriers should be permitted to deploy the most efficient and cost effective solutions for number portability that are compatible with their respective networks.
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- Significant issues must still be addressed beyond which architectures should be considered